

Title (en)

METHOD AND SYSTEM FOR DETECTING MIGRATION OF MEDICAL INSERTS OR IMPLANTS

Title (de)

VERFAHREN UND SYSTEM ZUR DETEKTION DER MIGRATION VON MEDIZINISCHEN EINSÄTZEN ODER IMPLANTATEN

Title (fr)

PROCÉDÉ ET SYSTÈME PERMETTANT DE DÉTECTER LA MIGRATION D'INSERTS OU D'IMPLANTS MÉDICAUX

Publication

**EP 3391808 A1 20181024 (EN)**

Application

**EP 17166755 A 20170418**

Priority

EP 17166755 A 20170418

Abstract (en)

A system is provided for determining the position of an implanted device (10) in a human or animal body relative to a probe (14). In one device, a reference signal is generated and it is received in the other device. A phase angle or an amplitude attenuation or difference between the reference signal and the received signal is used to determine the proximity of the probe to the implanted device. The approach makes use of body channel sensing by which the frequencies at which the body behaves as a waveguide are employed.

IPC 8 full level

**A61B 5/00** (2006.01); **A61B 5/06** (2006.01)

CPC (source: EP US)

**A61B 5/0031** (2013.01 - EP US); **A61B 5/061** (2013.01 - EP US); **A61B 5/746** (2013.01 - US); **G08B 21/182** (2013.01 - US); **H04L 7/0008** (2013.01 - US); **A61B 2503/40** (2013.01 - US)

Citation (applicant)

- NAMJUM CHO: "The Human Body Characteristics as a Signal Transmission Medium for Intrabody Communication", IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, 2007
- ZHANG, Y.: "SkinTrack: Using the Body as an Electrical Waveguide for Continuous Finger Tracking on the Skin", PROCEEDINGS OF THE 2016 CHI CONFERENCE ON HUMAN FACTORS IN COMPUTING SYSTEMS, 2016

Citation (search report)

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- [YA] US 2014371802 A1 20141218 - MASHIACH ADI [IL], et al
- [A] JP 2016005596 A 20160114 - YUPITERU CORP
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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3391808 A1 20181024**; EP 3612079 A1 20200226; US 2021145304 A1 20210520; WO 2018192786 A1 20181025

DOCDB simple family (application)

**EP 17166755 A 20170418**; EP 18719766 A 20180408; EP 2018058947 W 20180408; US 201816605259 A 20180408